

Muslims and the Medical Research: Past, Present, Future

Tayyaba Gul Malik

Received: 22 Sep 2011 / Accepted: 26 Oct 2011
© OMSB, 2011

Islam favors acquiring knowledge. The Creator of the universe has said in the Holy book the Quran:

"Not alike are the blind and the seeing." (35; 19)

And Allah asked the prophet Muhammad (peace be upon him) to say:Are the blind and the one who sees equal? Will you not then take thought?" (6; 50)

Thus, to think and reflect are the duties of every human being. Those nations who have used their minds and spent time in thinking and research are now leading the whole world. They have invested time and resources for research and have brought revolution in different walks of life. Islam opens the door to the Research. Allah states in the Holy Quran.

".....And follow not (i.e., say not, or do not or witness not) that of which you have no knowledge...." (17; 36)

The Muslims from the earlier times had realized the significance of acquiring knowledge and they were considered the pioneers in many fields of science including medicine. They were the medical scientists, who believed in the hadith of Prophet Muhammad (peace be upon him) which says;

"There is no disease that Allah has created, except that He also has created its treatment." (Sahih Al-Bukhari, book # 71, Hadith 582, narrated by Abu Huraira).

Medical research which is also called biomedical research has a key role in the development of knowledge in the field of medicine. In the middle Ages, Arabic was considered the language of science. One of the shining examples of that time is, "The Canon of medicine" (Al-Qanun fil Tibb). It was a fourteen volume book completed in 1025 and was written by Ibn-Sina. Apart from being considered as a medical Encyclopedia, its importance can be further depicted from the fact that it was translated into many languages and was read in medical schools at Montpellier and Leuven as late as 1650. Dr. William Osler (a Canadian physician) commented on it as "a medical Bible for a longer time than any other work."

Later, this work was taken over by Western Scientists who revolutionized the whole world and took the knowledge to its never

ending peaks. As a result, we are living in an "Era of knowledge explosion." It is said that the knowledge since Adam until now will be doubled in the next eight years. In this new world, most of the Muslim countries are still developing or underdeveloped. They have divided themselves into more than fifty countries on the basis of ethic, sects and tribes.

The energy they should spend on research and development is wasted in overcoming their internal disputes and petty matters. They are lagging behind in the major pillars of development (education, science and technology, research and development). This can be attributed to either lack of funds, lack of scientific leadership, brain drain, lack of dedicated young scientists, lack of equipment or unstable governments. Those who have a practical approach to research are not provided with suitable environment and ample resources.

The research work that has been done in many of these countries is either a repetition of studies in the western world or they were taken as an imposition for promotion but not as work which could have a positive impact on humanity. However, the need of time is that the Muslim countries with their common background and ethical concerns should involve themselves in research that suits the local situation. Many countries which are underdeveloped need researches to provide affordable medicines to the low socioeconomic classes. There are reports which show that old and expired drugs are dumped in the name of charity in these poor countries. Rich nations are testing their new medicines on the poor nations.

No one can deny the importance of research and its impact on the well being of humanity as a whole. As Muslim countries are lagging behind the non-Muslim countries, it is very important for the Muslims to get involved in the medical research and to find new horizons in this field. The encouraging part of the story is that in many Muslim countries, the new generation is beginning to realize the need of the hour. Many researchers of our new generation feel a deficit in the contributions by Muslims in the scientific and medical fields. They are accepting their responsibilities towards the future vision. They have pinpointed their weaknesses and realized that research is a potential engine for the development of a nation.

Such a trend can be seen in countries like Malaysia, Saudi Arabia, Pakistan, Oman, Kuwait, Iran and Jordan. Malaysia is spending 25% of its budget on education. Recently, they have launched the 9th Malaysian plan (2011-2015), under which they are planning 6 main institutes of health research. Similarly,

Tayyaba Gul Malik 
Assistant Professor of Ophthalmology
Lahore Medical and Dental College,
Lahore, Pakistan.
E-mail : tayyabam@yahoo.com

Saudi Arabia and Kuwait have the largest number of biomedical publications in the Gulf Co-operation Council countries,¹ but only 0.5% of Saudi papers appear in 200 of the highest impact factor journals.² Oman and UAE are steadily growing and Bahrain and Qatar are at a plateau. In 2008, the Scientific Medical Applied Research and Development (SMARD) Company was launched as Qatar's first biotechnology and medical research company.

Last year, Oman called for the global investment in medical research including H1N1 vaccines. In African Muslim countries, Tunisia had the largest number of PubMed publications.³ The use of nuclear technology for medical research by Pakistan and Iran has galvanized the western world. Recently, Iran is investing in Stem cell research and so far, they have been successful in isolating 6 human and 8 mouse embryonic stem cell lines. In 1997, 50 billion rials were invested in research in medicine in Iran. On the other hand, Pakistani Scientists have made historical achievement in mapping the first Pakistani genome. In this regard, they have become first in the Muslim world to map the first genome of a Muslim man.

However, this is not enough. The time has come to realize the present shortcomings for a future vision. A lot of further achievements are needed to join the race of medical accomplishments. A recent study published in 2009 showed the comparison of publications of Arab with the non-Arab Middle Eastern countries.⁴ It indicated that during the period 2001-2005, there were only 5775 publications from Arab countries in PubMed

compared to non-Arab countries, which had 25643 publications. Similarly, comparison with the Western developed nations indicates that a lot of work has to be done. The United States is leading the world in medical research because the total expenditure for the United States medical research has doubled in the past 10 years. The same is the case with other developed nations. Now it is the duty of Muslim countries to conduct research for the benefit of humankind.

"Come my friends! It is not too late to seek a newer world."
(Tennyson)

Acknowledgements

The author reported no conflict and no funding was received for this work.

References

1. Deleu D, Northway MG, Hanssens Y. Geographical distribution of biomedical publications from the Gulf Corporation Council countries. *Saudi Med J* 2001 Jan;22(1):10-12.
2. Tadmouri GO, Tadmouri NB. Biomedical research in the Kingdom of Saudi Arabia (1982-2000). *Saudi Med J* 2002 Jan;23(1):20-24.
3. Bakoush O, Al-Tubuly AA, Ashammakhi N, Elkhammas EA. Pubmed medical publications from Libya. *Libyan J Med. AOP*: 070625.
4. Benamer HT, Bakoush O. Arab nations lagging behind other Middle Eastern countries in biomedical research: a comparative study. *BMC Med Res Methodol* 2009;9:26.